

Amendments to the Claims:

Please amend claims 11 and 13, and please add new claims 70-84 as follows. Please cancel claims 9, 12, 30-32, 34-36 and 40-53 without prejudice. Following is a complete listing of the claims pending in the application, as amended:

1-6. (Cancelled)

7. (Previously Presented) The heating pad system of claim 17 wherein the foam pad is an upper foam pad, the heating pad system further comprising:

a lower foam pad, the thermal-electric heating element being sandwiched between the upper foam pad and the lower foam pad, the thermal-electric heating element and the upper and lower foam pads comprising the heating pad positionable on the support structure.

8. (Previously Presented) The heating pad system of claim 17 wherein the support structure is an operating room table.

9. (Cancelled)

10. (Previously Presented) The heating pad system of claim 17 wherein the foam pad is a rectilinear upper foam pad, the heating pad system further comprising:

a rectilinear lower foam pad, the heating element being sandwiched between the rectilinear upper foam pad and the rectilinear lower foam pad, the thermal-electric heating element and the upper and lower rectilinear foam pads comprising the heating pad positionable on the support structure.

11. (Currently Amended) ~~The heating pad system of claim 9 wherein the foam pad is an upper foam pad, the heating pad system further comprising:~~ A heating pad system useable for warming a person on a support structure, the heating pad system comprising:

a thermal-electric heating element;

an upper foam pad positioned adjacent to the thermal-electric heating element;
a lower foam pad, the thermal-electric heating element being sandwiched
between the upper foam pad and the lower foam pad, ~~wherein the;~~
a waterproof and antimicrobial cover encloses enclosing at least a portion of the
upper foam pad, the lower foam pad, and the thermal-electric heating
element;
a power unit for providing electrical power to the thermal-electric heating
element ~~and wherein the thermal-electric heating element, the upper and~~
~~lower foam pads, and the waterproof and antimicrobial cover comprise the~~
~~heating pad positionable on the support structure; and~~
a sealed connector secured to the waterproof and antimicrobial cover, the power
unit providing electrical power to the thermal-electric heating element via a
utility cord connected to the sealed connector.

12. (Cancelled)

13. (Currently Amended) A heating pad system useable for warming a person
on a support structure, the heating pad system comprising:

a thermal-electric heating element;
an upper foam pad positioned adjacent to the thermal-electric heating element,
the upper foam pad covering at least a portion of the thermal-electric
heating element;
a lower foam pad, the thermal-electric heating element being sandwiched
between the upper foam pad and the lower foam pad;
a fabric sleeve enclosing at least a portion of the thermal-electric heating element
between the thermal-electric heating element and the upper and lower
foam pads, ~~the thermal-electric heating element, the fabric sleeve, the~~
~~upper foam pad and the lower foam pad comprising a heating pad~~
~~positionable on the support structure; and~~
a power unit for providing electrical power to the thermal-electric heating
element, ~~the power unit including a control panel having at least one~~

~~temperature selector, the temperature selector for selecting at least one heating pad temperature.~~

14. (Cancelled)

15. (Previously Presented) The heating pad system of claim 17 wherein the heating pad further comprises:

a sheet of reflective material positioned adjacent to the foam pad, the foam pad being disposed between the sheet of reflective material and the thermal-electric heating element.

16. (Previously Presented) The heating pad system of claim 17 wherein the heating pad further comprises:

a reflective polyethylene material positioned adjacent to the foam pad, the foam pad being disposed between the reflective polyethylene material and the thermal-electric heating element.

17. (Previously Presented) A heating pad system useable for warming a person on a support structure, the heating pad system comprising:

a thermal-electric heating element;

a foam pad positioned adjacent to the thermal-electric heating element, wherein the foam pad has a first surface facing toward the thermal-electric heating element and a second surface facing away from the thermal-electric heating element, the thermal-electric heating element and the foam pad comprising a heating pad positionable on the support structure;

a power unit for providing electrical power to the thermal-electric heating element, the power unit including a control panel having at least one temperature selector, the temperature selector for selecting at least one heating pad temperature; and

a temperature sensor for measuring heating pad temperatures, wherein at least a portion of the temperature sensor is positioned closer to the second

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surface of the foam pad than the first surface of the foam pad, the temperature sensor being operably connected to the power unit, the power unit including a temperature control circuit coupled to the temperature sensor to control electrical power provided to the thermal-electric heating element based on a selected heating pad temperature and a measured heating pad temperature.

18. (Previously Presented) The heating pad system of claim 17 wherein the temperature sensor is embedded in the foam pad.

19. (Previously Presented) The heating pad system of claim 17 wherein the power unit includes a temperature display for displaying measured heating pad temperatures, and wherein the temperature sensor is operably connected to the power unit for providing measured heating pad temperatures to the temperature display.

20. (Previously Presented) The heating pad system of claim 17 wherein the power unit includes a temperature display for displaying measured heating pad temperatures, and wherein the temperature sensor is embedded in the foam pad and is operably connected to the power unit for providing measured heating pad temperatures to the temperature display.

21. (Previously Presented) The heating pad system of claim 17 wherein the power unit includes a digital numeric temperature display for displaying measured heating pad temperatures, and wherein the temperature sensor is operably connected to the power unit for providing measured heating pad temperatures to the temperature display.

22. (Previously Presented) The heating pad system of claim 17 wherein the power unit includes a temperature display for displaying measured heating pad temperatures, wherein the temperature sensor is a first temperature sensor, and wherein the heating pad system further comprises

a second temperature sensor for measuring heating pad temperatures, wherein at least a portion of the second temperature sensor is positioned adjacent to the second surface of the foam pad, the second temperature sensor being operably connected to the power unit for providing measured heating pad temperatures to the temperature display.

23. (Previously Presented) The heating pad system of claim 17 wherein: the foam pad is comprised of a viscoelastic foam; and the thermal-electric heating element is comprised of a carbon-filled plastic that receives electrical current for generating heat.

24. (Previously Presented) The heating pad system of claim 17 wherein: the foam pad is an upper foam pad comprised of a viscoelastic foam; the thermal-electric heating element is comprised of a carbon-filled plastic that receives electrical current for generating heat; and the heating pad system further comprises a lower foam pad comprised of a high-resiliency foam, the thermal-electric heating element being sandwiched between the upper foam pad and the lower foam pad.

25. (Previously Presented) The heating pad system of claim 17 wherein: the foam pad is an upper foam pad comprised of a slow-recovery viscoelastic foam weighing at least approximately 4 lb. per cubic foot and having an IFD rating of at least approximately 20; the thermal-electric heating element is comprised of a carbon-filled plastic that receives electrical current for generating heat; and the heating pad system further comprises a lower foam pad comprised of a high-resiliency foam weighing at least approximately 2.6 lb. per cubic foot and

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having an IFD rating of at least approximately 34, the thermal-electric heating element being sandwiched between the upper foam pad and the lower foam pad.

26. (Previously Presented) The heating pad system of claim 17 wherein the thermal-electric heating element is comprised of one or more copper elements for generating heat.

27. (Previously Presented) The heating pad system of claim 17 wherein the thermal-electric heating element is comprised of three longitudinally oriented copper braids suspended in a carbon-filled plastic, the carbon-filled plastic being at least substantially radiolucent.

28. (Previously Presented) A heating pad system useable for warming a person on a support structure, the heating pad system comprising:

- a thermal-electric heating element;
- a foam pad positioned adjacent to the thermal-electric heating element, the foam pad covering at least a portion of the thermal-electric heating element, the thermal-electric heating element and the foam pad comprising a heating pad positionable on the support structure;
- a power unit for providing electrical power to the thermal-electric heating element, the power unit including a control panel having at least one temperature selector, the temperature selector for selecting at least one heating pad temperature; and
- an alternating pressure pad positioned adjacent to the thermal-electric heating element, the alternating pressure pad covering at least a portion of the thermal-electric heating element.

29. (Previously Presented) The heating pad system of claim 28 wherein the foam pad is an upper foam pad, the heating pad system further comprising a lower foam pad, the thermal-electric heating element being sandwiched between the upper foam pad and the lower foam pad, and wherein the alternating pressure pad is interposed between the upper and lower foam pads.

30-32. (Cancelled)

33. (Previously Presented) The heating pad system of claim 17 further comprising:

an auxiliary grounding device connected to the power unit and being positionable in contact with the person on the support structure to electrically ground the person on the support structure.

34-63. (Cancelled)

64. (Previously Presented) A heating pad useable for warming a person on a support structure, the heating pad comprising:

a heating element;

a compressible pad positioned adjacent to the heating element; and

at least a first temperature sensor for measuring heating pad temperatures, wherein at least a portion of the first temperature sensor is spaced apart from the heating element and is carried by the compressible pad.

65. (Previously Presented) The heating pad of claim 64 wherein the compressible pad has a first surface facing toward the heating element and a second surface facing away from the heating element, and wherein the temperature sensor is

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positioned closer to the second surface of the compressible pad than the first surface of the compressible pad.

66. (Previously Presented) The heating pad of claim 65 wherein the compressible pad has an uncompressed thickness of at least .50 inch between the first and second surfaces.

67. (Previously Presented) The heating pad of claim 64, further comprising an antimicrobial cover enclosing at least portions of the heating element and the compressible pad.

68. (Previously Presented) The heating pad of claim 64, further comprising a power unit for providing electrical power to the heating element, wherein the temperature sensor is operably connected to the power unit to control electrical power provided to the heating element based at least partially on a measured heating pad temperature.

69. (Previously Presented) A heating pad useable for warming a person on a support structure, the heating pad comprising:

- a heating element;
- an upper foam pad positioned adjacent to the heating element;
- a lower foam pad, the heating element being sandwiched between the upper foam pad and the lower foam pad; and
- a flame-resistant sleeve enclosing at least a portion of the heating element between the heating element and the upper and lower foam pads.

70. (New) The heating pad of claim 69, further comprising a cover enclosing at least a portion of the upper foam pad, the lower foam pad, the heating element and the flame-resistant sleeve.

71. (New) The heating pad of claim 69, further comprising a waterproof and antimicrobial cover enclosing at least a portion of the upper foam pad, the lower foam pad, the heating element and the flame-resistant sleeve

72. (New) The heating pad of claim 69 wherein at least a portion of the flame-resistant sleeve includes non-woven material.

73. (New) The heating pad of claim 69 wherein at least a portion of the flame-resistant sleeve includes woven material.

74. (New) The heating pad of claim 69 wherein at least a portion of the flame-resistant sleeve includes a flexible, thin-sheet material.

75. (New) The heating pad system of claim 13 wherein the thermal-electric heating element, the fabric sleeve, the upper foam pad, and the lower foam pad comprise a heating pad positionable on the support structure, and wherein the power unit includes a control panel having at least one temperature selector, the temperature selector for selecting at least one heating pad temperature.

76. (New) The heating pad system of claim 13 wherein at least a portion of the fabric sleeve includes non-woven fabric.

77. (New) The heating pad system of claim 13 wherein at least a portion of the fabric sleeve includes woven fabric.

78. (New) The heating pad system of claim 13 wherein the fabric sleeve is fire resistant.

79. (New) The heating pad system of claim 13 wherein the fabric sleeve is fire retardant.

80. (New) The heating pad system of claim 13 wherein the fabric sleeve is fireproof.

81. (New) A heating pad system useable for warming a person on a support structure, the heating pad system comprising:

- a thermal-electric heating element;
- an upper foam pad positioned adjacent to the thermal-electric heating element, the upper foam pad covering at least a portion of the thermal-electric heating element;
- a lower foam pad, the thermal-electric heating element being sandwiched between the upper foam pad and the lower foam pad;
- a film sleeve enclosing at least a portion of the thermal-electric heating element between the thermal-electric heating element and the upper and lower foam pads; and
- a power unit for providing electrical power to the thermal-electric heating element.

82. (New) The heating pad system of claim 81 wherein the thermal-electric heating element, the film sleeve, the upper foam pad, and the lower foam pad comprise a heating pad positionable on the support structure, and wherein the power unit includes a control panel having at least one temperature selector, the temperature selector for selecting at least one heating pad temperature.

83. (New) The heating pad system of claim 81 wherein the film sleeve is fire resistant.

84. (New) The heating pad system of claim 81 wherein the film sleeve is fire retardant.